Application No. 10/530,879 Docket No.: 1209-0184PUS2

After Final Office Action of July 1, 2009

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An isolated antigenic composition, which composition

comprises

(i) a first antigen, which first antigen comprises at least part of an isolated protein of

Streptococcus equi subsp equi, which protein is designated EAG and which at least

part of said protein comprises at least one antigenic epitope or antigenic determinant

of Streptococcus equi, and

which first antigen comprises at least the N-terminal amino acid sequence of

EAG, which comprises the amino acid sequence of SEQ ID NO:1,

(ii) a second antigen, which second antigen comprises at least part of an isolated

protein of Streptococcus equi, which protein is designated SEC and comprises the

amino acid sequence of SEQ ID NO:4, and which at least part of said protein

comprises at least one antigenic epitope or antigenic determinant of Streptococcus

equi, and

which second antigen comprises at least the N-terminal collagen-binding part of

SEC which comprises the amino acid sequence of amino acids 2-303 in SEQ ID

NO:22, and

(iii) a third antigen, which third antigen comprises at least part of an isolated

protein of Streptococcus equi, which protein is designated Sc1C and comprises the

amino acid sequence of SEQ ID NO:23 and which at least part of said protein

comprises at least one antigenic epitope or antigenic determinant of Streptococcus

equi, and

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which third antigen comprises at least the immunogenic fragment of Sc1C, which fragment comprises the amino acid sequence of amino acids 2-233 in SEQ ID NO:27.

2. (Currently Amended) The isolated antigenic composition of claim 1,

wherein said antigens—are comprised of consist of the N-terminal part of EAG in accordance with claim 1 (i), the collagen-binding part of SEC in accordance with claim 1 (ii), which collagen binding part comprises the amino acid sequence of amino acids 2-303 in SEQ ID NO:22 and the immunogenic fragment of SclC in accordance with claim 1 (iii), which fragment is designated SCL Cl and provokes production of antibodies, and which fragment comprises the amino acid sequence of amino acids 2-233 in SEQ ID NO:27.

3. (Currently Amended) The isolated antigenic composition of claim 1,

wherein said collagen binding part of SEC comprises the amino acid sequence of <u>amino</u> acids 2-590 in SEQ ID NO:20 and is designated SEC2.16.

4. (Currently Amended) The isolated antigenic composition of claim 1,

wherein said third antigen is comprised of consists of SCL Cl comprising the amino acid sequence of amino acids 2-233 in SEQ ID NO: 27.

5. (Currently Amended) The isolated antigenic composition of claim 1,

which (iv) comprises at least one further antigen that comprises an isolated protein

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Streptococcus equi or a part of said protein, which part comprises at least one antigenic epitope

or antigenic determinant of Streptococcus equi, and which protein is selected from the group

consisting of

(a) an isolated protein designated FNZ which comprises the amino acid sequence of SEQ

ID NO:2 or an N-terminal fibronectin-binding part of FNZ comprising the amino acid sequence

of amino acids 4-309 in SEO ID NO:13, and

(b) an isolated protein designated SFS which comprises the amino acid sequence of SEQ

ID NO: 3 or a part of SFS comprising the amino acid sequence of amino acids 3-121 in SEQ ID

NO:10.

6. (Cancelled).

7. (Currently Amended) A vaccine An immunizing composition, which comprises the

antigenic composition of claim 1 as an immunizing component, and a pharmaceutically

acceptable carrier.

8. (Currently Amended) The vaccine immunizing composition of claim 7, which further

comprises an adjuvant.

9. (Cancelled).

10. (Currently Amended) The vaccine immunizing composition of claim 7, which is

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provided in a physiologically administrable form and suitably is administrable by subcutaneous

or intranasal inoculation.

11. (Cancelled).

12. (Currently Amended) A method for preparation of a vaccine an immunizing

composition for protecting immunizing non-human mammals against infection of Streptococcus

equi. which-vaccine immunizing composition contains the antigenic composition of claim 1,

which antigenic composition comprises antigens, which antigens are prepared in accordance with

a method comprising the following steps:

(a) providing a DNA fragment encoding said antigen and introducing said fragment into

an expression vector;

(b) introducing said vector, which contains said DNA fragment, into a compatible host

cell:

(c) culturing said host cell provided in step (b) under conditions required for expression

of the antigen encoded by said DNA fragment; and

(d) isolating the expressed antigen from the cultured host cell, and, optionally,

(e) purifying the isolated product from step (d) by affinity chromatography or other

chromatographic methods known in the art and

which method comprises mixing said antigenic composition with a pharmaceutically

acceptable carrier.

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13. (Currently Amended) A method for preparation of a vaccine an immunizing

composition, which-vaecine contains as immunizing component, an antigenic composition of

claim 1, said method comprising mixing said antigenic composition and a pharmaceutically

acceptable carrier.

14. (Cancelled).

15. (Previously Presented) A method for the production of an antiserum, said method

comprising administering an antigenic preparation of claim 1 to an animal host to produce

antibodies in said animal host and recovering antiserum containing said antibodies produced in

said animal host.

16. (Currently Amended) A method of prophylaetie immunizing or therapeutic treatment

of S. equi infection in non-human mammals, suitably horses, comprising administering to said

mammal an immunologically effective amount of-a-vaccine the immunizing composition of

claim 7.

17. (Currently Amended) A method for-protecting immunizing horses against

Streptococcus equi infection, which comprises inoculating a horse-subeutaneously or intranasally

with-a-vaccine the immunizing composition of claim 7 to induce an immune response against

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Streptococcus equi in said horse.

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18. (Previously Presented) The method of claim 17, wherein an immune response in the

form of IgG and/or IgA and/or IgM antibodies in the nasopharyngeal mucus is induced in said

horse.

19. (Withdrawn) Monoclonal antibodies against antigen(s) of the composition of claim 1.

20. (Cancelled).

21. (Currently Amended) The vaccine immunizing composition of claim 7, which further

comprises an adjuvant.

22. (Withdrawn) A method of prophylactic or therapeutic treatment of S. equi infection

in non-human mammals, comprising administering to said mammal an immunologically

effective amount of an antiserum produced according to claim 15.

23. (New) The immunizing composition of claim 7 which reduces severity of S. equi

infection in non-human mammals.

24. (New) The method of claim 16, where the non-human mammals comprise horses.

25. (New) The method of claim 17, wherein the horse is inoculated subcutaneously or

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intranasally.

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